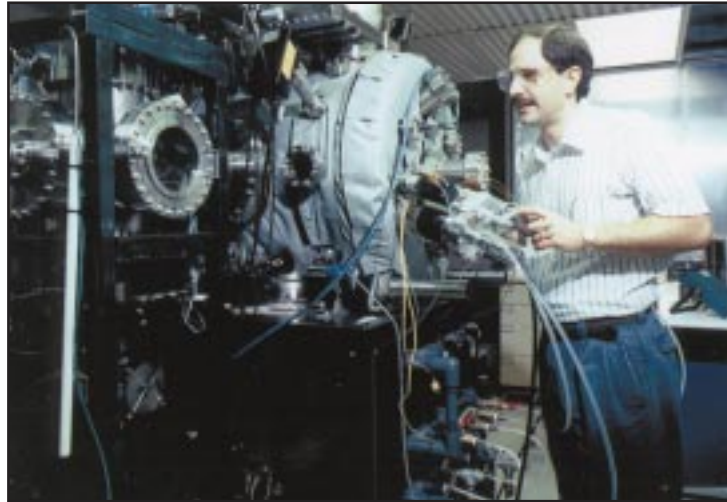




# DR. DIMIDUK APPOINTED AFRL FELLOW

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## Payoff

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Dr. Dimiduk's appointment as an Air Force Research Laboratory (AFRL) Fellow recognizes his achievements in metals development and materials processes research required for current and future Air Force systems.

## Accomplishment

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Dr. Dennis M. Dimiduk, a materials research scientist with the Materials and Manufacturing Directorate's (ML's) Metals Development and Materials Processing Branch, has been selected as an AFRL Fellow. AFRL recognized Dr. Dimiduk for several technical accomplishments in advanced metals and intermetallic alloys research and high-temperature materials technology. Dr. Dimiduk significantly influenced the basis for the Air Force Advanced Intermetallic Materials Thrust and contributed to the Laboratory's Integrated High Performance Turbine Engine Technology (IHPTET) initiative.

## Background

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Dr. Dimiduk, a graduate of Carnegie Mellon University, is an internationally recognized authority and has been actively involved in advanced metals and intermetallic alloys research and high-temperature materials technology for more than a decade. Since joining ML in 1977, Dr. Dimiduk has defined the Air Force and Department of Defense programs on intermetallic metals and authored more than 90 technical papers. Dr. Dimiduk holds patents on advanced metals and processes and spent a year at the University of Oxford, in England, conducting collaborative research and lecturing on structural intermetallic alloys. He is currently an adjunct professor of engineering at Wright State University in Dayton, Ohio, and a member of the editorial board of an international journal on intermetallics. He is widely recognized for his contributions in understanding and controlling the properties of gamma titanium-aluminide alloys as high temperature structural materials. His research in this area led to the successful development of an entirely new class of alloys offering revolutionary prospects for weight reduction in turbine engines and opened an approach toward surpassing the nearly 70-year mark of success established by super alloys. Dr. Dimiduk's research efforts could have a substantial impact on the design and development of advanced aerospace systems, hypersonic vehicles and advanced aircraft engines such as the F119. He has received several high level awards for his important achievements, including the 1991 Air Force Systems Command's Alan T. Waterman Award for Science. Twice he was selected a "Star-Team" Leader by the Air Force Office of Scientific Research. Dr. Dimiduk was also a 1997 recipient of the Outstanding Engineers and Scientists Award presented annually by the Affiliate Societies Council and is an elected Fellow of ASM International. Only two percent of the organization's 50,000 members receive this honor. The AFRL Fellows Award, the Laboratory's highest honor, confers lifetime status on the recipient, recognizing outstanding contributions in research and development or exceptional technical program management and includes a \$100,000 research grant.